



# TWO COLUMN DIOXIN & FURAN CALIBRATION SOLUTION CS4H (UNLABELED/13C12, 99%)

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 11/11/2019

Revision date:

Version: 1.0

EDF-5429-CS4H

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Product form : Mixtures  
Product name : TWO COLUMN DIOXIN & FURAN CALIBRATION SOLUTION CS4H (UNLABELED/13C12, 99%)  
Product code : EDF-5429-CS4H

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### 1.2.1. Relevant identified uses

Main use category : Professional use  
Industrial/Professional use spec : For professional use only

#### 1.2.2. Uses advised against

No additional information available

### 1.3. Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc.  
50 Frontage Road  
Andover, MA 01810  
USA  
USA: 1-800-322-1174 Int: 1-978-749-8000  
[cilsales@isotope.com](mailto:cilsales@isotope.com) [www.isotope.com](http://www.isotope.com)

### Emergency telephone number

Emergency numbers:

Chemtrec: 1-800-424-9300 (24 hours)  
International: 1-703-741-5970 (24 hours)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flam. Liq. 3 H226  
Acute Tox. 4 (Inhalation:vapour) H332  
Skin Irrit. 2 H315  
Eye Irrit. 2 H319  
STOT SE 3 H336  
Asp. Tox. 1 H304

Full text of hazard classes and H-statements : see section 16

#### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

R10  
Xn; R20  
Xn; R65  
Xi; R36/38  
R67

Full text of R-phrases: see section 16

#### GHS-US classification

Flam. Liq. 3 H226  
Acute Tox. 4 (Inhalation) H332  
Skin Irrit. 2 H315  
Eye Irrit. 2 H319  
STOT SE 3 H336  
Asp. Tox. 1 H304

Full text of H statements : see section 16

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### Adverse physicochemical, human health and environmental effects

Central Nervous System. Flammable liquid and vapor. May cause drowsiness or dizziness. Harmful if inhaled. Causes skin irritation. Causes serious eye irritation. May be fatal if swallowed and enters airways.

## 2.2. Label elements

### Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



Signal word (CLP)

: Danger

Hazard statements (CLP)

: H226 - Flammable liquid and vapor  
H304 - May be fatal if swallowed and enters airways  
H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H332 - Harmful if inhaled  
H336 - May cause drowsiness or dizziness

Precautionary statements (CLP)

: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P233 - Keep container tightly closed.  
P240 - Ground/bond container and receiving equipment.  
P241 - Use explosion-proof electrical, lighting, ventilating equipment  
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.  
P264 - Wash hands, forearms and face thoroughly after handling.  
P271 - Use only outdoors or in a well-ventilated area.  
P280 - Wear eye protection, face protection, protective clothing, protective gloves.

### GHS-US labeling

Hazard pictograms (GHS-US)



Signal word (GHS-US)

: Danger

Hazard statements (GHS-US)

: H226 - Flammable liquid and vapor  
H304 - May be fatal if swallowed and enters airways  
H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H332 - Harmful if inhaled  
H336 - May cause drowsiness or dizziness

Precautionary statements (GHS-US)

: P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking.  
P233 - Keep container tightly closed.  
P240 - Ground/Bond container and receiving equipment  
P241 - Use explosion-proof electrical, lighting, ventilating equipment  
P242 - Use only non-sparking tools.  
P243 - Take precautionary measures against static discharge.  
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.  
P264 - Wash hands, forearms and face thoroughly after handling.  
P271 - Use only outdoors or in a well-ventilated area.  
P280 - Wear eye protection, face protection, protective clothing, protective gloves.  
P301+P310 - If swallowed: Immediately call a doctor, a POISON CENTER  
P302+P352 - If on skin: Wash with plenty of water  
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing  
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P312 - Call a doctor, a POISON CENTER if you feel unwell  
P321 - Specific treatment (see Hazardous component(s) for labeling on this label)  
P331 - Do NOT induce vomiting.  
P332+P313 - If skin irritation occurs: Get medical advice/attention.

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P337+P313 - If eye irritation persists: Get medical advice/attention.  
P362+P364 - Take off contaminated clothing and wash it before reuse.  
P370+P378 - In case of fire: Use alcohol resistant foam, carbon dioxide (CO<sub>2</sub>), dry extinguishing powder to extinguish.  
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.  
P403+P235 - Store in a well-ventilated place. Keep cool.  
P405 - Store locked up.  
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Directive 67/548/EEC
N-NONANE UNLABELED	(CAS-No.) 111-84-2 (EC-No.) 203-913-4	97.886052	R10 Xn; R20 Xn; R65 Xi; R36/38 R67
TOLUENE UNLABELED	(CAS-No.) 108-88-3 (EC-No.) 203-625-9 (EC Index-No.) 601-021-00-3 (REACH-no) 01-2119471310-51	0.033664	F; R11 Xi; R38 Xn; R65 Repr.Cat.3; R62 Repr.Cat.3; R63 R67 N; R51/53 Xn; R48/20
OCTACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 39001-02-0	0.000007	Xn; R22 Xi; R36 R53
OCTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 3268-87-9	0.000007	T+; R28 Xi; R36 Carc.Cat.3; R40
1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 35822-46-9	0.0000028	Xn; R22 Xn; R65 R53
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 72918-21-9	0.0000028	Xn; R22 Xi; R36 R53
1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 55673-89-7	0.0000028	Xn; R22 Xi; R36 R53
OCTACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 39001-02-0 (Unlabeled)	0.0000028	Xn; R22 Xi; R36 R53
OCTACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 3268-87-9 (Unlabeled)	0.0000028	Xn; R22 Xn; R65 R53
1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 39227-28-6	0.0000028	Xn; R22 Xn; R65 R53
1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 57652-85-7	0.0000028	Xn; R22 Xn; R65 R53
1,2,3,4,7,8-HEXACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 70648-26-9	0.0000028	Xn; R22 Xi; R36 R53

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Name	Product identifier	%	Classification according to Directive 67/548/EEC
1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 67562-39-4	0.0000028	Xn; R22 Xi; R36 R53
1,2,3,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 57117-44-9	0.0000028	Xn; R22 Xi; R36 R53
2,3,4,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 60851-34-5	0.0000028	Xn; R22 Xi; R36 R53
1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 19408-74-3	0.0000028	Xn; R20/21/22 Carc.Cat.1; R45
1,2,3,6,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 57117-44-9 (Unlabeled)	0.0000014	Xn; R22 Xi; R36 R53
2,3,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 51207-31-9 (Unlabeled)	0.0000014	Xn; R22 Xi; R36 R53
1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 40321-76-4 (Unlabeled)	0.0000014	Xn; R22 Xn; R65 R53
1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 39227-28-6 (Unlabeled)	0.0000014	Xn; R22 Xn; R65 R53
1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 19408-74-3 (Unlabeled)	0.0000014	Xn; R22 Xn; R65 R53
1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 57652-85-7 (Unlabeled)	0.0000014	Xn; R22 Xn; R65 R53
1,2,3,4,6,7-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) NA	0.0000014	Xn; R22 Xn; R65 R53
1,3,6,8-TETRACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 71998-72-6 (Unlabeled)	0.0000014	Xi; R36/37/38 Xn; R22 R53
1,2,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 58802-20-3 (Unlabeled)	0.0000014	Xi; R36/37/38 Xn; R22 R53
2,3,4,7,8-PENTACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 57117-31-4 (Unlabeled)	0.0000014	Xn; R22 Xi; R36 R53
1,2,3,4,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 70648-26-9 (Unlabeled)	0.0000014	Xn; R22 Xi; R36 R53
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 72918-21-9 (Unlabeled)	0.0000014	Xn; R22 Xi; R36 R53
2,3,4,6,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 60851-34-5 (Unlabeled)	0.0000014	Xn; R22 Xi; R36 R53
1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 55673-89-7 (Unlabeled)	0.0000014	Xn; R22 Xi; R36 R53
1,2,3,7,8-PENTACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 57117-46-6 (Unlabeled)	0.0000014	Xn; R22 Xi; R36 R53

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1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 67562-39-4 (Unlabeled)	0.0000014	Xn; R22 Xi; R36 R53
1,2,7,8-TETRACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 58802-20-3	0.0000014	Xi; R36/37/38 Xn; R22 R53
1,3,6,8-TETRACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 71998-72-6	0.0000014	Xi; R36/37/38 Xn; R22 R53
1,2,3,4-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 114423-99-3 (Unlabeled)	0.0000014	T+; R26/27/28 Carc.Cat.1; R45
2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 1746-01-6 (Unlabeled)	0.0000014	Xn; R65 R53 Xn; R20/22
1,2,3,4,6-PENTACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 83704-47-6 (EC-No.) (EC Index-No.)	0.0000014	Xi; R36/37/38 Xn; R22 R53
1,2,3,4,6,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 69698-58-4 (EC-No.) (EC Index-No.)	0.0000014	Xi; R36/37/38 Xn; R22 R53
1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 35822-46-9 (Unlabeled)	0.0000014	Xn; R22 Xn; R65 R53
2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 1746-01-6	0.0000014	Xn; R22 Xn; R65 R53
1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 40321-76-4	0.0000014	Xn; R22 Xn; R65 R53
2,3,7,8-TETRACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 51207-31-9	0.0000014	Xn; R22 Xi; R36 R53
1,2,3,7,8-PENTACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 57117-41-6	0.0000014	Xn; R22 Xi; R36 R53
2,3,4,7,8-PENTACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 57117-31-4	0.0000014	Xn; R22 Xi; R36 R53
1,2,8,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 62470-54-6	0.0000014	T+; R26/27/28 Carc.Cat.1; R45
1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 33423-92-6	0.0000014	T+; R26/27/28 Carc.Cat.1; R45
1,3,7,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 62470-53-5	0.0000014	T+; R26/27/28 Carc.Cat.1; R45
1,2,8,9-TETRACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 70648-22-5 (EC-No.) (EC Index-No.)	0.0000014	Xi; R36/37/38 Xn; R22 R53
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
N-NONANE UNLABELED	(CAS-No.) 111-84-2 (EC-No.) 203-913-4	97.886052	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation:vapour), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H336 Asp. Tox. 1, H304

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TOLUENE UNLABELED	(CAS-No.) 108-88-3 (EC-No.) 203-625-9 (EC Index-No.) 601-021-00-3 (REACH-no) 01-2119471310-51	0.033664	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304
OCTACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 39001-02-0	0.000007	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
OCTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 3268-87-9	0.000007	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 35822-46-9	0.0000028	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 72918-21-9	0.0000028	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 55673-89-7	0.0000028	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
OCTACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 39001-02-0 (Unlabeled)	0.0000028	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
OCTACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 3268-87-9 (Unlabeled)	0.0000028	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 39227-28-6	0.0000028	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 57652-85-7	0.0000028	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,4,7,8-HEXACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 70648-26-9	0.0000028	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 67562-39-4	0.0000028	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,3,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 57117-44-9	0.0000028	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
2,3,4,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 60851-34-5	0.0000028	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 19408-74-3	0.0000028	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:dust,mist), H332 Carc. 1A, H350
1,2,3,6,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 57117-44-9 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
2,3,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 51207-31-9 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 40321-76-4 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 39227-28-6 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 19408-74-3 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 57652-85-7 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,4,6,7-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) NA	0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413

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1,3,6,8-TETRACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 71998-72-6 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 4, H413
1,2,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 58802-20-3 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 4, H413
2,3,4,7,8-PENTACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 57117-31-4 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,3,4,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 70648-26-9 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 72918-21-9 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
2,3,4,6,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 60851-34-5 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 55673-89-7 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,3,7,8-PENTACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 57117-46-6 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 67562-39-4 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,7,8-TETRACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 58802-20-3	0.0000014	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 4, H413
1,3,6,8-TETRACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 71998-72-6	0.0000014	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 4, H413
1,2,3,4-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 114423-99-3 (Unlabeled)	0.0000014	Acute Tox. 2 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 2 (Inhalation:dust,mist), H330 Carc. 1A, H350
2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 1746-01-6 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,4,6-PENTACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 83704-47-6 (EC-No.) (EC Index-No.)	0.0000014	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 4, H413
1,2,3,4,6,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 69698-58-4 (EC-No.) (EC Index-No.)	0.0000014	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 4, H413
1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 35822-46-9 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 1746-01-6	0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 40321-76-4	0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
2,3,7,8-TETRACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 51207-31-9	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,3,7,8-PENTACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 57117-41-6	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413



# TWO COLUMN DIOXIN & FURAN CALIBRATION SOLUTION CS4H (UNLABELED/13C12, 99%)

EDF-5429-CS4H

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2,3,4,7,8-PENTACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 57117-31-4	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,8,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 62470-54-6	0.0000014	Acute Tox. 2 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 2 (Inhalation:dust,mist), H330 Carc. 1A, H350
1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 33423-92-6	0.0000014	Acute Tox. 2 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 2 (Inhalation:dust,mist), H330 Carc. 1A, H350
1,3,7,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 62470-53-5	0.0000014	Acute Tox. 2 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 2 (Inhalation:dust,mist), H330 Carc. 1A, H350
1,2,8,9-TETRACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 70648-22-5 (EC-No.) (EC Index-No.)	0.0000014	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 4, H413

Name	Product identifier	%	GHS-US classification
N-NONANE UNLABELED	(CAS-No.) 111-84-2	97.886052	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H336 Asp. Tox. 1, H304
TOLUENE UNLABELED	(CAS-No.) 108-88-3	0.033664	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 2, H401
OCTACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 39001-02-0	0.000007	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
OCTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 3268-87-9	0.000007	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 35822-46-9	0.0000028	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 72918-21-9	0.0000028	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 55673-89-7	0.0000028	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
OCTACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 39001-02-0 (Unlabeled)	0.0000028	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
OCTACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 3268-87-9 (Unlabeled)	0.0000028	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 39227-28-6	0.0000028	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 57652-85-7	0.0000028	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,4,7,8-HEXACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 70648-26-9	0.0000028	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 67562-39-4	0.0000028	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
1,2,3,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 57117-44-9	0.0000028	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413



# TWO COLUMN DIOXIN & FURAN CALIBRATION SOLUTION CS4H (UNLABELED/13C12, 99%)

EDF-5429-CS4H

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Name	Product identifier	%	GHS-US classification
2,3,4,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 60851-34-5	0.0000028	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 19408-74-3	0.0000028	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Carc. 1A, H350
1,2,3,6,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 57117-44-9 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
2,3,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 51207-31-9 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 40321-76-4 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 39227-28-6 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 19408-74-3 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 57652-85-7 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,4,6,7-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) NA	0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,3,6,8-TETRACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 71998-72-6 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 4, H413
1,2,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 58802-20-3 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 4, H413
2,3,4,7,8-PENTACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 57117-31-4 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
1,2,3,4,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 70648-26-9 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 72918-21-9 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
2,3,4,6,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 60851-34-5 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 55673-89-7 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
1,2,3,7,8-PENTACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 57117-46-6 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 67562-39-4 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
1,2,7,8-TETRACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 58802-20-3	0.0000014	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 4, H413
1,3,6,8-TETRACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 71998-72-6	0.0000014	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 4, H413
1,2,3,4-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 114423-99-3 (Unlabeled)	0.0000014	Acute Tox. 1 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 1 (Inhalation), H330 Carc. 1A, H350
2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 1746-01-6 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413

# TWO COLUMN DIOXIN & FURAN CALIBRATION SOLUTION CS4H (UNLABELED/<sup>13</sup>C<sup>12</sup>, 99%)

EDF-5429-CS4H

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Name	Product identifier	%	GHS-US classification
1,2,3,4,6-PENTACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 83704-47-6	0.0000014	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 4, H413
1,2,3,4,6,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 69698-58-4	0.0000014	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 4, H413
1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 35822-46-9 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 1746-01-6	0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 40321-76-4	0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
2,3,7,8-TETRACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 51207-31-9	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
1,2,3,7,8-PENTACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 57117-41-6	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
2,3,4,7,8-PENTACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 57117-31-4	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
1,2,8,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 62470-54-6	0.0000014	Acute Tox. 1 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 1 (Inhalation), H330 Carc. 1A, H350
1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 33423-92-6	0.0000014	Acute Tox. 1 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 1 (Inhalation), H330 Carc. 1A, H350
1,3,7,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 62470-53-5	0.0000014	Acute Tox. 1 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 1 (Inhalation), H330 Carc. 1A, H350
1,2,8,9-TETRACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 70648-22-5	0.0000014	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 4, H413

Full text of R- and H- phrases: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: Call a physician immediately.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor/physician if you feel unwell. Give oxygen or artificial respiration if necessary.
First-aid measures after skin contact	: Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Do not induce vomiting. Call a physician immediately.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects	: May cause drowsiness or dizziness.
Symptoms/effects after inhalation	: Harmful if inhaled. May cause respiratory irritation.
Symptoms/effects after skin contact	: Causes skin irritation. May be harmful in contact with skin.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: May be fatal if swallowed and enters airways. Risk of lung edema.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

# TWO COLUMN DIOXIN & FURAN CALIBRATION SOLUTION CS4H (UNLABELED/13C12, 99%)

EDF-5429-CS4H

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide. Alcohol resistant foam.

#### 5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapor.

Reactivity : Flammable liquid and vapor. Vapors may form flammable mixture with air.

#### 5.3. Advice for firefighters

Firefighting instructions : Do not enter fire area without proper protective equipment, including respiratory protection.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Emergency procedures : Wear personal protective equipment. Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing fume, gas, mist, spray, vapors. Avoid contact with skin and eyes.

##### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

For containment : Dike and contain spill. Dispose as hazardous waste. Comply with local regulations for disposal.

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Additional hazards when processed : Avoid all contact with skin, eyes, or clothing. Keep away from sources of ignition - No smoking. Do not breathe gas/fumes/vapor/spray (appropriate wording to be specified by the manufacturer). Take precautionary measures against static discharges.

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing fume, gas, mist, spray, vapors. Avoid contact with skin and eyes.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

#### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Store in a well-ventilated place. Keep container tightly closed. Keep dry. Ground/bond container and receiving equipment.

Storage conditions : Store at room temperature away from light and moisture.

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

TWO COLUMN DIOXIN & FURAN CALIBRATION SOLUTION CS4H (UNLABELED/13C12, 99%)		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	200.00000000 ppm USA. ACGIH Threshold Limit Values (TLV)
Italy - Portugal - USA ACGIH	Remark (ACGIH)	CNS impair
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	1050 mg/m <sup>3</sup> USA. NIOSH Recommended Exposure Limits

# TWO COLUMN DIOXIN & FURAN CALIBRATION SOLUTION CS4H (UNLABELED/13C12, 99%)

EDF-5429-CS4H

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<b>TWO COLUMN DIOXIN &amp; FURAN CALIBRATION SOLUTION CS4H (UNLABELED/13C12, 99%)</b>		
USA NIOSH	NIOSH REL (TWA) (ppm)	200 ppm USA. NIOSH Recommended Exposure Limits
USA NIOSH	Remark (NIOSH)	Central Nervous System impairment
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	1050 mg/m <sup>3</sup> USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000
USA OSHA	OSHA PEL (TWA) (ppm)	200 ppm USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000
USA OSHA	OSHA PEL (Ceiling) (mg/m <sup>3</sup> )	1050 California permissible exposure limits for chemical contaminants.
USA OSHA	OSHA PEL (Ceiling) (ppm)	200 ppm California permissible exposure limits for chemical contaminants.
<b>TOLUENE UNLABELED (108-88-3)</b>		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	20.00000000 ppm USA. ACGIH Threshold Limit Values (TLV)
Italy - Portugal - USA ACGIH	Remark (ACGIH)	Visual impairment. Female reproductive. Pregnancy loss. 2015 Adoption. Substances for which there is a Biological Exposure Index or Indices (see BEI® section). Not classifiable as a human carcinogen.; Component: Toluene CAS-No.: 108-88-3 Parameters: Toluene Value: 0.0300 mg/l Biological specimen: Urine Remarks: End of shift (As soon as possible after exposure ceases) Basis: ACGIH - Biological Exposure Indices (BEI); Component: Toluene CAS-No.: 108-88-3 Parameters: Toluene Value: 0.0200 mg/l Biological specimen: In blood Remarks: Prior to last shift of workweek Basis: ACGIH - Biological Exposure Indices (BEI); Component: Toluene CAS-No.: 108-88-3 Parameters: o-Cresol Value: 0.3000 mg/g Biological specimen: Urine Remarks: End of shift (As soon as possible after exposure ceases) Basis: ACGIH - Biological Exposure Indices (BEI)
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	375 mg/m <sup>3</sup> USA. NIOSH Recommended Exposure Limits
USA NIOSH	NIOSH REL (TWA) (ppm)	100 ppm USA. NIOSH Recommended Exposure Limits
USA NIOSH	NIOSH REL (STEL) (mg/m <sup>3</sup> )	560 mg/m <sup>3</sup> USA. NIOSH Recommended Exposure Limits
USA NIOSH	NIOSH REL (STEL) (ppm)	150 ppm USA. NIOSH Recommended Exposure Limits
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	375 mg/m <sup>3</sup> USA. OSHA - TABLE Z-1 Limits for Air Contaminants 1910.1000
USA OSHA	OSHA PEL (TWA) (ppm)	100 ppm USA. OSHA - TABLE Z-1 Limits for Air Contaminants 1910.1000
USA OSHA	OSHA PEL (STEL) (mg/m <sup>3</sup> )	560 mg/m <sup>3</sup> USA. OSHA - TABLE Z-1 Limits for Air Contaminants 1910.1000
USA OSHA	OSHA PEL (STEL) (ppm)	150 ppm USA. OSHA - TABLE Z-1 Limits for Air Contaminants 1910.1000
USA OSHA	OSHA PEL (Ceiling) (ppm)	300 ppm USA. Occupational Exposure Limits (OSHA) - Table Z-2
USA OSHA	Remark (OSHA)	OSHA PEL (TWA) - 200 ppm - USA. Occupational Exposure Limits (OSHA) - Table Z-2. Remarks: Z37.12-1967
<b>N-NONANE UNLABELED (111-84-2)</b>		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	200.00000000 ppm USA. ACGIH Threshold Limit Values (TLV)
Italy - Portugal - USA ACGIH	Remark (ACGIH)	CNS impair
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	1050 mg/m <sup>3</sup> USA. NIOSH Recommended Exposure Limits

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N-NONANE UNLABELED (111-84-2)		
USA NIOSH	NIOSH REL (TWA) (ppm)	200 ppm USA. NIOSH Recommended Exposure Limits
USA NIOSH	Remark (NIOSH)	Central Nervous System impairment
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	1050 mg/m <sup>3</sup> USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000
USA OSHA	OSHA PEL (TWA) (ppm)	200 ppm USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000
USA OSHA	OSHA PEL (Ceiling) (mg/m <sup>3</sup> )	1050 California permissible exposure limits for chemical contaminants.
USA OSHA	OSHA PEL (Ceiling) (ppm)	200 ppm California permissible exposure limits for chemical contaminants.

### 8.2. Exposure controls

- Appropriate engineering controls : Ensure good ventilation of the work station.  
Personal protective equipment : Protective clothing. Protective goggles. Gloves. Self-contained breathing apparatus.



- Materials for protective clothing : Wear suitable protective clothing and gloves.  
Hand protection : protective gloves.  
Eye protection : Chemical goggles or face shield. Chemical goggles or safety glasses.  
Skin and body protection : Wear suitable protective clothing, gloves and eye/face protection.  
Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Approved respirator.  
Environmental exposure controls : Avoid release to the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

The properties listed below are for the solvent, the main component of this mixture.

- Physical state : Liquid  
Appearance : Liquid  
Color : Colorless  
Odor : No data available  
Odor threshold : No data available  
pH : No data available  
Relative evaporation rate (butyl acetate=1) : No data available  
Melting point : No data available  
Freezing point : No data available  
Boiling point : No data available  
Flash point : No data available  
Auto-ignition temperature : No data available  
Decomposition temperature : No data available  
Flammability (solid, gas) : No data available  
Vapor pressure : No data available  
Relative vapor density at 20 °C : No data available  
Relative density : No data available  
Solubility : No data available  
Log Pow : No data available  
Log Kow : No data available  
Viscosity, kinematic : No data available  
Viscosity, dynamic : No data available  
Explosive properties : No data available  
Oxidizing properties : No data available  
Explosion limits : No data available

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### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Flammable liquid and vapor. Vapors may form flammable mixture with air.

### 10.2. Chemical stability

See storage and expiration date on CoA.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Carbon oxides (CO, CO<sub>2</sub>).

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Inhalation:vapour: Harmful if inhaled.

<b>TWO COLUMN DIOXIN &amp; FURAN CALIBRATION SOLUTION CS4H (UNLABELED/13C12, 99%)</b>	
LC50 inhalation rat (mg/l)	23760 mg/m <sup>3</sup> male - 4 h
ATE CLP (vapors)	11.000 mg/l/4h
Skin corrosion/irritation, Dermal, rat	Result: Skin Irritation (Draize Test)
Additional information	: S. Typhimurium Result: negative
<b>2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (1746-01-6)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>2,3,7,8-TETRACHLORODIBENZOFURAN UNLABELED (51207-31-9)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN UNLABELED (40321-76-4)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,7,8-PENTACHLORODIBENZOFURAN UNLABELED (57117-41-6)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>2,3,4,7,8-PENTACHLORODIBENZOFURAN UNLABELED (57117-31-4)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (33423-92-6)</b>	
ATE CLP (oral)	5.000 mg/kg body weight
ATE CLP (dermal)	5.000 mg/kg body weight
ATE CLP (dust, mist)	0.050 mg/l/4h
<b>1,3,7,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (62470-53-5)</b>	
ATE CLP (oral)	5.000 mg/kg body weight
ATE CLP (dermal)	5.000 mg/kg body weight
ATE CLP (dust, mist)	0.050 mg/l/4h
<b>1,2,8,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (62470-54-6)</b>	
ATE CLP (oral)	5.000 mg/kg body weight
ATE CLP (dermal)	5.000 mg/kg body weight
ATE CLP (dust, mist)	0.050 mg/l/4h
<b>1,3,6,8-TETRACHLORODIBENZOFURAN UNLABELED (71998-72-6)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,7,8-TETRACHLORODIBENZOFURAN UNLABELED (58802-20-3)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,8,9-TETRACHLORODIBENZOFURAN UNLABELED (70648-22-5)</b>	
ATE CLP (oral)	500.000 mg/kg body weight



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<b>1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (39227-28-6)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (19408-74-3)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
ATE CLP (dermal)	1100.000 mg/kg body weight
ATE CLP (dust, mist)	1.500 mg/l/4h
<b>1,2,3,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED (57117-44-9)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>2,3,4,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED (60851-34-5)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN UNLABELED (67562-39-4)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (57652-85-7)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,4,7,8-HEXACHLORODIBENZOFURAN UNLABELED (70648-26-9)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,7,8,9-HEXACHLORODIBENZOFURAN UNLABELED (72918-21-9)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN UNLABELED (35822-46-9)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN UNLABELED (55673-89-7)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>OCTACHLORODIBENZO-P-DIOXIN UNLABELED (3268-87-9)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>OCTACHLORODIBENZOFURAN UNLABELED (39001-02-0)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) (1746-01-6 (Unlabeled))</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>2,3,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%) (51207-31-9 (Unlabeled))</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN (13C12, 99%) (40321-76-4 (Unlabeled))</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,7,8-PENTACHLORODIBENZOFURAN (13C12, 99%) (57117-46-6 (Unlabeled))</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>2,3,4,7,8-PENTACHLORODIBENZOFURAN (13C12, 99%) (57117-31-4 (Unlabeled))</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,4-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) (114423-99-3 (Unlabeled))</b>	
ATE CLP (oral)	5.000 mg/kg body weight
ATE CLP (dermal)	5.000 mg/kg body weight
ATE CLP (dust, mist)	0.050 mg/l/4h
<b>1,2,3,4,6,7-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%) (NA)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,3,6,8-TETRACHLORODIBENZOFURAN (13C12, 99%) (71998-72-6 (Unlabeled))</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%) (58802-20-3 (Unlabeled))</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,4,6-PENTACHLORODIBENZOFURAN (13C12, 99%) (83704-47-6)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,4,6,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%) (69698-58-4)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%) (39227-28-6 (Unlabeled))</b>	
ATE CLP (oral)	500.000 mg/kg body weight



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<b>1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%) (19408-74-3 (Unlabeled))</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,6,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%) (57117-44-9 (Unlabeled))</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>2,3,4,6,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%) (60851-34-5 (Unlabeled))</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN (13C12, 99%) (67562-39-4 (Unlabeled))</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>OCTACHLORODIBENZOFURAN (13C12, 99%) (39001-02-0 (Unlabeled))</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%) (57652-85-7 (Unlabeled))</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,4,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%) (70648-26-9 (Unlabeled))</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,7,8,9-HEXACHLORODIBENZOFURAN (13C12, 99%) (72918-21-9 (Unlabeled))</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN (13C12, 99%) (35822-46-9 (Unlabeled))</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%) (55673-89-7 (Unlabeled))</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>OCTACHLORODIBENZO-P-DIOXIN (13C12, 99%) (3268-87-9 (Unlabeled))</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>TOLUENE UNLABELED (108-88-3)</b>	
LD50 oral rat	> 5580 mg/kg
LD50 dermal rabbit	12196 mg/kg
LC50 inhalation rat (mg/l)	12,500 - 28,800 mg/m3 - 4 h
ATE CLP (dermal)	12196.000 mg/kg body weight
ATE CLP (vapors)	12.500 mg/l/4h
ATE CLP (dust, mist)	12.500 mg/l/4h
<b>N-NONANE UNLABELED (111-84-2)</b>	
LC50 inhalation rat (mg/l)	23760 mg/m <sup>3</sup> male - 4 h
ATE CLP (vapors)	11.000 mg/l/4h
Skin corrosion/irritation, Dermal, rat	Result: Skin Irritation (Draize Test)
Additional information	: S. Typhimurium Result: negative

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: May cause drowsiness or dizziness.
Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: May be fatal if swallowed and enters airways.
Potential Adverse human health effects and symptoms	: This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.
Symptoms/effects after inhalation	: Harmful if inhaled. May cause respiratory irritation.
Symptoms/effects after skin contact	: Causes skin irritation. May be harmful in contact with skin.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: May be fatal if swallowed and enters airways. Risk of lung edema.

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### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

<b>TOLUENE UNLABELED (108-88-3)</b>	
EC50 Daphnia 1	8 mg/l Daphnia magna (Water flea) - 24h
LC50 fish 2	7.63 mg/l Oncorhynchus mykiss (Rainbow trout) - 96 h
EC50 Daphnia 2	6 mg/l Daphnia magna (Water flea) - Immobilization - 48 h
ErC50 (algae)	245 mg/l Chlorella vulgaris (Fresh water algae) - 24 h
ErC50 (other aquatic plants)	10 mg/l Pseudokirchneriella subcapitata (Green algae) - 24 h
NOEC (chronic)	5.44 mg/l Pimephales promelas (fathead minnow) - 7 d

#### 12.2. Persistence and degradability

<b>1,2,3,7,8-PENTACHLORODIBENZOFURAN (13C12, 99%) (57117-46-6 (Unlabeled))</b>	
Persistence and degradability	Not available.
<b>2,3,4,7,8-PENTACHLORODIBENZOFURAN (13C12, 99%) (57117-31-4 (Unlabeled))</b>	
Persistence and degradability	Not available.
<b>1,2,3,6,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%) (57117-44-9 (Unlabeled))</b>	
Persistence and degradability	Not available.
<b>2,3,4,6,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%) (60851-34-5 (Unlabeled))</b>	
Persistence and degradability	Not available.
<b>1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN (13C12, 99%) (67562-39-4 (Unlabeled))</b>	
Persistence and degradability	Not available.
<b>OCTACHLORODIBENZOFURAN (13C12, 99%) (39001-02-0 (Unlabeled))</b>	
Persistence and degradability	Not available.
<b>1,2,3,4,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%) (70648-26-9 (Unlabeled))</b>	
Persistence and degradability	Not available.
<b>1,2,3,7,8,9-HEXACHLORODIBENZOFURAN (13C12, 99%) (72918-21-9 (Unlabeled))</b>	
Persistence and degradability	Not available.
<b>1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%) (55673-89-7 (Unlabeled))</b>	
Persistence and degradability	Not available.
<b>TOLUENE UNLABELED (108-88-3)</b>	
Persistence and degradability	Readily biodegradable.

#### 12.3. Bioaccumulative potential

<b>TWO COLUMN DIOXIN &amp; FURAN CALIBRATION SOLUTION CS4H (UNLABELED/13C12, 99%)</b>	
Bioaccumulative potential	Indication of bioaccumulation.
<b>1,2,3,7,8-PENTACHLORODIBENZOFURAN (13C12, 99%) (57117-46-6 (Unlabeled))</b>	
Bioaccumulative potential	Not available.
<b>2,3,4,7,8-PENTACHLORODIBENZOFURAN (13C12, 99%) (57117-31-4 (Unlabeled))</b>	
Bioaccumulative potential	Not available.
<b>1,2,3,6,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%) (57117-44-9 (Unlabeled))</b>	
Bioaccumulative potential	Not available.
<b>2,3,4,6,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%) (60851-34-5 (Unlabeled))</b>	
Bioaccumulative potential	Not available.
<b>1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN (13C12, 99%) (67562-39-4 (Unlabeled))</b>	
Bioaccumulative potential	Not available.
<b>OCTACHLORODIBENZOFURAN (13C12, 99%) (39001-02-0 (Unlabeled))</b>	
Bioaccumulative potential	Not available.
<b>1,2,3,4,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%) (70648-26-9 (Unlabeled))</b>	
Bioaccumulative potential	Not available.
<b>1,2,3,7,8,9-HEXACHLORODIBENZOFURAN (13C12, 99%) (72918-21-9 (Unlabeled))</b>	
Bioaccumulative potential	Not available.

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<b>1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%) (55673-89-7 (Unlabeled))</b>	
Bioaccumulative potential	Not available.

<b>TOLUENE UNLABELED (108-88-3)</b>	
BCF fish 1	0.05 mg/l Leuciscus idus (Golden orfe) - 3 d
Bioconcentration factor (BCF REACH)	90

<b>N-NONANE UNLABELED (111-84-2)</b>	
Log Pow	5.65
Bioaccumulative potential	Indication of bioaccumulation.

### 12.4. Mobility in soil

<b>1,2,3,7,8-PENTACHLORODIBENZOFURAN (13C12, 99%) (57117-46-6 (Unlabeled))</b>	
Ecology - soil	Not available.

<b>2,3,4,7,8-PENTACHLORODIBENZOFURAN (13C12, 99%) (57117-31-4 (Unlabeled))</b>	
Ecology - soil	Not available.

<b>1,2,3,6,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%) (57117-44-9 (Unlabeled))</b>	
Ecology - soil	Not available.

<b>2,3,4,6,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%) (60851-34-5 (Unlabeled))</b>	
Ecology - soil	Not available.

<b>1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN (13C12, 99%) (67562-39-4 (Unlabeled))</b>	
Ecology - soil	Not available.

<b>OCTACHLORODIBENZOFURAN (13C12, 99%) (39001-02-0 (Unlabeled))</b>	
Ecology - soil	Not available.

<b>1,2,3,4,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%) (70648-26-9 (Unlabeled))</b>	
Ecology - soil	Not available.

<b>1,2,3,7,8,9-HEXACHLORODIBENZOFURAN (13C12, 99%) (72918-21-9 (Unlabeled))</b>	
Ecology - soil	Not available.

<b>1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%) (55673-89-7 (Unlabeled))</b>	
Ecology - soil	Not available.

### 12.5. Results of PBT and vPvB assessment

<b>TOLUENE UNLABELED (108-88-3)</b>	
PBT: not relevant – no registration required	

### 12.6. Other adverse effects

Other adverse effects : Disposal must be done according to official regulations. Very toxic to aquatic life with long lasting effects.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional legislation (waste) : Waste materials should be disposed of under conditions which meet Federal, State, and local environmental control regulations.

Product/Packaging disposal recommendations : Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Ecology - waste materials : Dispose of as unused product.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

### 14.1. UN number

UN-No.(DOT) : 1920  
DOT NA no. UN1920

### 14.2. UN proper shipping name

Proper Shipping Name (DOT) : Nonanes  
Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

# TWO COLUMN DIOXIN & FURAN CALIBRATION SOLUTION CS4H (UNLABELED/13C12, 99%)

EDF-5429-CS4H

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Hazard labels (DOT) : 3 - Flammable liquid



Packing group (DOT) : III - Minor Danger

DOT Special Provisions (49 CFR 172.102) : B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable.

IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).

T2 - 1.5 178.274(d)(2) Normal..... 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling =  $97 / 1 + a (tr - tf)$  Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.

DOT Packaging Exceptions (49 CFR 173.xxx) : 150

DOT Packaging Non Bulk (49 CFR 173.xxx) : 203

DOT Packaging Bulk (49 CFR 173.xxx) : 242

Marine pollutant : No

### 14.3. Additional information

Emergency Response Guide (ERG) Number : 128

Other information : No supplementary information available.

### Overland transport

Packing group (ADR) : III

Class (ADR) : 3 - Flammable liquid

Hazard identification number (Kemler No.) : 30

Classification code (ADR) : F1

Hazard labels (ADR) : 3 - Flammable liquids



Orange plates



Tunnel restriction code (ADR) : D/E

Limited quantities (ADR) : 5l

EAC : 3Y

Excepted quantities (ADR) : E1

### Transport by sea

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

MFAG-No : 128

### Air transport

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 60 L

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 220 L

# TWO COLUMN DIOXIN & FURAN CALIBRATION SOLUTION CS4H (UNLABELED/13C12, 99%)

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Civil Aeronautics Law

: Flammable liquids

### 14.4. Environmental hazards

Other information : No supplementary information available.

### 14.5. Special precautions for user

### 14.6. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### TWO COLUMN DIOXIN & FURAN CALIBRATION SOLUTION CS4H (UNLABELED/13C12, 99%)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
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SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
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SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard
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SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
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#### 2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (1746-01-6)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
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SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
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#### 2,3,7,8-TETRACHLORODIBENZOFURAN UNLABELED (51207-31-9)

SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
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SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
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#### 1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN UNLABELED (40321-76-4)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
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SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
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#### 1,2,3,7,8-PENTACHLORODIBENZOFURAN UNLABELED (57117-41-6)

SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
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SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
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#### 2,3,4,7,8-PENTACHLORODIBENZOFURAN UNLABELED (57117-31-4)

SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
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SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
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#### 1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (33423-92-6)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
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SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
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#### 1,3,7,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (62470-53-5)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
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SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
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#### 1,2,8,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (62470-54-6)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
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SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
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#### 1,3,6,8-TETRACHLORODIBENZOFURAN UNLABELED (71998-72-6)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

# TWO COLUMN DIOXIN & FURAN CALIBRATION SOLUTION CS4H (UNLABELED/13C12, 99%)

EDF-5429-CS4H

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<b>1,3,6,8-TETRACHLORODIBENZOFURAN UNLABELED (71998-72-6)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,7,8-TETRACHLORODIBENZOFURAN UNLABELED (58802-20-3)</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,8,9-TETRACHLORODIBENZOFURAN UNLABELED (70648-22-5)</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (39227-28-6)</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (19408-74-3)</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED (57117-44-9)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>2,3,4,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED (60851-34-5)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN UNLABELED (67562-39-4)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (57652-85-7)</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,4,7,8-HEXACHLORODIBENZOFURAN UNLABELED (70648-26-9)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,7,8,9-HEXACHLORODIBENZOFURAN UNLABELED (72918-21-9)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN UNLABELED (35822-46-9)</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN UNLABELED (55673-89-7)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.



# TWO COLUMN DIOXIN & FURAN CALIBRATION SOLUTION CS4H (UNLABELED/13C12, 99%)

EDF-5429-CS4H

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<b>OCTACHLORODIBENZO-P-DIOXIN UNLABELED (3268-87-9)</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>OCTACHLORODIBENZOFURAN UNLABELED (39001-02-0)</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) (1746-01-6 (Unlabeled))</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>2,3,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%) (51207-31-9 (Unlabeled))</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN (13C12, 99%) (40321-76-4 (Unlabeled))</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,7,8-PENTACHLORODIBENZOFURAN (13C12, 99%) (57117-46-6 (Unlabeled))</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>2,3,4,7,8-PENTACHLORODIBENZOFURAN (13C12, 99%) (57117-31-4 (Unlabeled))</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,4-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) (114423-99-3 (Unlabeled))</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,4,6,7-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%) (NA)</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>1,3,6,8-TETRACHLORODIBENZOFURAN (13C12, 99%) (71998-72-6 (Unlabeled))</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%) (58802-20-3 (Unlabeled))</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,4,6-PENTACHLORODIBENZOFURAN (13C12, 99%) (83704-47-6)</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,4,6,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%) (69698-58-4)</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.



# TWO COLUMN DIOXIN & FURAN CALIBRATION SOLUTION CS4H (UNLABELED/13C12, 99%)

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<b>1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%) (39227-28-6 (Unlabeled))</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%) (19408-74-3 (Unlabeled))</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,6,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%) (57117-44-9 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>2,3,4,6,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%) (60851-34-5 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN (13C12, 99%) (67562-39-4 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>OCTACHLORODIBENZOFURAN (13C12, 99%) (39001-02-0 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%) (57652-85-7 (Unlabeled))</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,4,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%) (70648-26-9 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,7,8,9-HEXACHLORODIBENZOFURAN (13C12, 99%) (72918-21-9 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN (13C12, 99%) (35822-46-9 (Unlabeled))</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%) (55673-89-7 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>OCTACHLORODIBENZO-P-DIOXIN (13C12, 99%) (3268-87-9 (Unlabeled))</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>TOLUENE UNLABELED (108-88-3)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
CERCLA RQ	1000 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302

# TWO COLUMN DIOXIN & FURAN CALIBRATION SOLUTION CS4H (UNLABELED/13C12, 99%)

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<b>TOLUENE UNLABELED (108-88-3)</b>	
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Subject to reporting requirements of United States SARA Section 313
<b>N-NONANE UNLABELED (111-84-2)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.

### 15.2. International regulations

#### CANADA

<b>TWO COLUMN DIOXIN &amp; FURAN CALIBRATION SOLUTION CS4H (UNLABELED/13C12, 99%)</b>
Listed on the Canadian DSL (Domestic Substances List)
<b>2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (1746-01-6)</b>
Not listed on the Canadian DSL (Domestic Substances List)
<b>1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN UNLABELED (40321-76-4)</b>
<b>1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (33423-92-6)</b>
<b>1,3,7,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (62470-53-5)</b>
<b>1,2,8,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (62470-54-6)</b>
<b>1,3,6,8-TETRACHLORODIBENZOFURAN UNLABELED (71998-72-6)</b>
<b>1,2,7,8-TETRACHLORODIBENZOFURAN UNLABELED (58802-20-3)</b>
<b>1,2,8,9-TETRACHLORODIBENZOFURAN UNLABELED (70648-22-5)</b>
<b>1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (39227-28-6)</b>
<b>1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (19408-74-3)</b>
<b>1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (57652-85-7)</b>
<b>1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN UNLABELED (35822-46-9)</b>
<b>OCTACHLORODIBENZO-P-DIOXIN UNLABELED (3268-87-9)</b>
<b>2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) (1746-01-6 (Unlabeled))</b>
Not listed on the Canadian DSL (Domestic Substances List)
<b>1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN (13C12, 99%) (40321-76-4 (Unlabeled))</b>
<b>1,2,3,4-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) (114423-99-3 (Unlabeled))</b>
Not listed on the Canadian DSL (Domestic Substances List)
<b>1,2,3,4,6,7-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%) (NA)</b>
<b>1,3,6,8-TETRACHLORODIBENZOFURAN (13C12, 99%) (71998-72-6 (Unlabeled))</b>
<b>1,2,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%) (58802-20-3 (Unlabeled))</b>
<b>1,2,3,4,6-PENTACHLORODIBENZOFURAN (13C12, 99%) (83704-47-6)</b>
<b>1,2,3,4,6,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%) (69698-58-4)</b>
<b>1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%) (39227-28-6 (Unlabeled))</b>
<b>1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%) (19408-74-3 (Unlabeled))</b>
<b>1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%) (57652-85-7 (Unlabeled))</b>
<b>1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN (13C12, 99%) (35822-46-9 (Unlabeled))</b>
<b>OCTACHLORODIBENZO-P-DIOXIN (13C12, 99%) (3268-87-9 (Unlabeled))</b>
<b>TOLUENE UNLABELED (108-88-3)</b>
Listed on the Canadian DSL (Domestic Substances List)

# TWO COLUMN DIOXIN & FURAN CALIBRATION SOLUTION CS4H (UNLABELED/<sup>13</sup>C<sub>12</sub>, 99%)

EDF-5429-CS4H

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### **N-NONANE UNLABELED (111-84-2)**

Listed on the Canadian DSL (Domestic Substances List)

#### 15.2.1. National regulations

##### **1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN UNLABELED (40321-76-4)**

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

##### **1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (33423-92-6)**

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

##### **1,3,7,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (62470-53-5)**

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

##### **1,2,8,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (62470-54-6)**

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

##### **1,3,6,8-TETRACHLORODIBENZOFURAN UNLABELED (71998-72-6)**

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

##### **1,2,7,8-TETRACHLORODIBENZOFURAN UNLABELED (58802-20-3)**

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

##### **1,2,8,9-TETRACHLORODIBENZOFURAN UNLABELED (70648-22-5)**

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

##### **1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (39227-28-6)**

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

##### **1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (19408-74-3)**

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

##### **1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (57652-85-7)**

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

##### **1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN UNLABELED (35822-46-9)**

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

##### **OCTACHLORODIBENZO-P-DIOXIN UNLABELED (3268-87-9)**

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

##### **2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN (<sup>13</sup>C<sub>12</sub>, 99%) (1746-01-6 (Unlabeled))**

##### **1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN (<sup>13</sup>C<sub>12</sub>, 99%) (40321-76-4 (Unlabeled))**

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

##### **1,2,3,4-TETRACHLORODIBENZO-P-DIOXIN (<sup>13</sup>C<sub>12</sub>, 99%) (114423-99-3 (Unlabeled))**

##### **1,2,3,4,6,7-HEXACHLORODIBENZO-P-DIOXIN (<sup>13</sup>C<sub>12</sub>, 99%) (NA)**

##### **1,3,6,8-TETRACHLORODIBENZOFURAN (<sup>13</sup>C<sub>12</sub>, 99%) (71998-72-6 (Unlabeled))**

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

##### **1,2,7,8-TETRACHLORODIBENZOFURAN (<sup>13</sup>C<sub>12</sub>, 99%) (58802-20-3 (Unlabeled))**

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

##### **1,2,3,4,6-PENTACHLORODIBENZOFURAN (<sup>13</sup>C<sub>12</sub>, 99%) (83704-47-6)**

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

##### **1,2,3,4,6,8,9-HEPTACHLORODIBENZOFURAN (<sup>13</sup>C<sub>12</sub>, 99%) (69698-58-4)**

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

##### **1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN (<sup>13</sup>C<sub>12</sub>, 99%) (39227-28-6 (Unlabeled))**

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

##### **1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN (<sup>13</sup>C<sub>12</sub>, 99%) (19408-74-3 (Unlabeled))**

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

##### **1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN (<sup>13</sup>C<sub>12</sub>, 99%) (57652-85-7 (Unlabeled))**

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

##### **1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN (<sup>13</sup>C<sub>12</sub>, 99%) (35822-46-9 (Unlabeled))**

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

##### **OCTACHLORODIBENZO-P-DIOXIN (<sup>13</sup>C<sub>12</sub>, 99%) (3268-87-9 (Unlabeled))**

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

# TWO COLUMN DIOXIN & FURAN CALIBRATION SOLUTION CS4H (UNLABELED/13C12, 99%)

EDF-5429-CS4H

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

**TOLUENE UNLABELED (108-88-3)**

**N-NONANE UNLABELED (111-84-2)**

### 15.3. US State regulations

#### TWO COLUMN DIOXIN & FURAN CALIBRATION SOLUTION CS4H (UNLABELED/13C12, 99%)()

U.S. - California - Proposition 65 - Carcinogens List	No
U.S. - California - Proposition 65 - Developmental Toxicity	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No
State or local regulations	U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances

#### 2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (1746-01-6)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	

#### 2,3,7,8-TETRACHLORODIBENZOFURAN UNLABELED (51207-31-9)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	

#### 1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN UNLABELED (40321-76-4)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	

#### 1,2,3,7,8-PENTACHLORODIBENZOFURAN UNLABELED (57117-41-6)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	

#### 2,3,4,7,8-PENTACHLORODIBENZOFURAN UNLABELED (57117-31-4)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	

#### 1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (33423-92-6)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	

#### 1,3,7,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (62470-53-5)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	

# TWO COLUMN DIOXIN & FURAN CALIBRATION SOLUTION CS4H (UNLABELED/13C12, 99%)

EDF-5429-CS4H

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<b>1,3,7,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (62470-53-5)</b>				
Yes	No	No	No	
<b>1,2,8,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (62470-54-6)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,3,6,8-TETRACHLORODIBENZOFURAN UNLABELED (71998-72-6)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,7,8-TETRACHLORODIBENZOFURAN UNLABELED (58802-20-3)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,8,9-TETRACHLORODIBENZOFURAN UNLABELED (70648-22-5)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (39227-28-6)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (19408-74-3)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED (57117-44-9)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>2,3,4,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED (60851-34-5)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN UNLABELED (67562-39-4)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	

# TWO COLUMN DIOXIN & FURAN CALIBRATION SOLUTION CS4H (UNLABELED/13C12, 99%)

EDF-5429-CS4H

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<b>1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (57652-85-7)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,4,7,8-HEXACHLORODIBENZOFURAN UNLABELED (70648-26-9)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,7,8,9-HEXACHLORODIBENZOFURAN UNLABELED (72918-21-9)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN UNLABELED (35822-46-9)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN UNLABELED (55673-89-7)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>OCTACHLORODIBENZO-P-DIOXIN UNLABELED (3268-87-9)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>OCTACHLORODIBENZOFURAN UNLABELED (39001-02-0)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) (1746-01-6 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	
<b>2,3,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%) (51207-31-9 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN (13C12, 99%) (40321-76-4 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	



# TWO COLUMN DIOXIN & FURAN CALIBRATION SOLUTION CS4H (UNLABELED/13C12, 99%)

EDF-5429-CS4H

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<b>1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN (13C12, 99%) (40321-76-4 (Unlabeled))</b>				
		Female	Male	
Yes	No	No	No	
<b>1,2,3,7,8-PENTACHLORODIBENZOFURAN (13C12, 99%) (57117-46-6 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>2,3,4,7,8-PENTACHLORODIBENZOFURAN (13C12, 99%) (57117-31-4 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,4-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) (114423-99-3 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,4,6,7-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%) (NA)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>1,3,6,8-TETRACHLORODIBENZOFURAN (13C12, 99%) (71998-72-6 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%) (58802-20-3 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,4,6-PENTACHLORODIBENZOFURAN (13C12, 99%) (83704-47-6)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>1,2,3,4,6,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%) (69698-58-4)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%) (39227-28-6 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)



# TWO COLUMN DIOXIN & FURAN CALIBRATION SOLUTION CS4H (UNLABELED/13C12, 99%)

EDF-5429-CS4H

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<b>1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%) (39227-28-6 (Unlabeled))</b>				
Yes	No	No	No	
<b>1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%) (19408-74-3 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,6,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%) (57117-44-9 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>2,3,4,6,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%) (60851-34-5 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN (13C12, 99%) (67562-39-4 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>OCTACHLORODIBENZOFURAN (13C12, 99%) (39001-02-0 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%) (57652-85-7 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,4,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%) (70648-26-9 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,7,8,9-HEXACHLORODIBENZOFURAN (13C12, 99%) (72918-21-9 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN (13C12, 99%) (35822-46-9 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	

# TWO COLUMN DIOXIN & FURAN CALIBRATION SOLUTION CS4H (UNLABELED/13C12, 99%)

EDF-5429-CS4H

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<b>1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%) (55673-89-7 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>OCTACHLORODIBENZO-P-DIOXIN (13C12, 99%) (3268-87-9 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>TOLUENE UNLABELED (108-88-3)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	Yes	No	No	
<b>N-NONANE UNLABELED (111-84-2)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (1746-01-6)</b>				
<b>State or local regulations</b>				
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List				
<b>2,3,7,8-TETRACHLORODIBENZOFURAN UNLABELED (51207-31-9)</b>				
<b>State or local regulations</b>				
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List				
<b>1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN UNLABELED (40321-76-4)</b>				
<b>State or local regulations</b>				
U.S. - Pennsylvania - Schedule I Controlled Substances U.S. - New Jersey - Right to Know Hazardous Substance List				
<b>1,2,3,7,8-PENTACHLORODIBENZOFURAN UNLABELED (57117-41-6)</b>				
<b>State or local regulations</b>				
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List				
<b>2,3,4,7,8-PENTACHLORODIBENZOFURAN UNLABELED (57117-31-4)</b>				
<b>State or local regulations</b>				
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List				
<b>1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (33423-92-6)</b>				
<b>State or local regulations</b>				
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List				
<b>1,3,7,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (62470-53-5)</b>				
<b>State or local regulations</b>				
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List				

# TWO COLUMN DIOXIN & FURAN CALIBRATION SOLUTION CS4H (UNLABELED/13C12, 99%)

EDF-5429-CS4H

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<b>1,2,8,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (62470-54-6)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,3,6,8-TETRACHLORODIBENZOFURAN UNLABELED (71998-72-6)</b>
<b>State or local regulations</b>
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
<b>1,2,7,8-TETRACHLORODIBENZOFURAN UNLABELED (58802-20-3)</b>
<b>State or local regulations</b>
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
<b>1,2,8,9-TETRACHLORODIBENZOFURAN UNLABELED (70648-22-5)</b>
<b>State or local regulations</b>
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
<b>1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (39227-28-6)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (19408-74-3)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED (57117-44-9)</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2,3,4,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED (60851-34-5)</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN UNLABELED (67562-39-4)</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (57652-85-7)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,4,7,8-HEXACHLORODIBENZOFURAN UNLABELED (70648-26-9)</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,7,8,9-HEXACHLORODIBENZOFURAN UNLABELED (72918-21-9)</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List

# TWO COLUMN DIOXIN & FURAN CALIBRATION SOLUTION CS4H (UNLABELED/13C12, 99%)

EDF-5429-CS4H

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<b>1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN UNLABELED (35822-46-9)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN UNLABELED (55673-89-7)</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>OCTACHLORODIBENZO-P-DIOXIN UNLABELED (3268-87-9)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>OCTACHLORODIBENZOFURAN UNLABELED (39001-02-0)</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) (1746-01-6 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2,3,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%) (51207-31-9 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN (13C12, 99%) (40321-76-4 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,7,8-PENTACHLORODIBENZOFURAN (13C12, 99%) (57117-46-6 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2,3,4,7,8-PENTACHLORODIBENZOFURAN (13C12, 99%) (57117-31-4 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,4-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) (114423-99-3 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,4,6,7-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%) (NA)</b>
<b>State or local regulations</b>
WARNING! This product contains a chemical known by the state of California to cause cancer, birth defects or other reproductive harm.
<b>1,3,6,8-TETRACHLORODIBENZOFURAN (13C12, 99%) (71998-72-6 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List

# TWO COLUMN DIOXIN & FURAN CALIBRATION SOLUTION CS4H (UNLABELED/13C12, 99%)

EDF-5429-CS4H

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<b>1,2,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%) (58802-20-3 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
<b>1,2,3,4,6-PENTACHLORODIBENZOFURAN (13C12, 99%) (83704-47-6)</b>
<b>State or local regulations</b>
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
<b>1,2,3,4,6,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%) (69698-58-4)</b>
<b>State or local regulations</b>
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
<b>1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%) (39227-28-6 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%) (19408-74-3 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,6,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%) (57117-44-9 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2,3,4,6,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%) (60851-34-5 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN (13C12, 99%) (67562-39-4 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>OCTACHLORODIBENZOFURAN (13C12, 99%) (39001-02-0 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%) (57652-85-7 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,4,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%) (70648-26-9 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,7,8,9-HEXACHLORODIBENZOFURAN (13C12, 99%) (72918-21-9 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List

# TWO COLUMN DIOXIN & FURAN CALIBRATION SOLUTION CS4H (UNLABELED/13C12, 99%) EDF-5429-CS4H

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<b>1,2,3,7,8,9-HEXACHLORODIBENZOFURAN (13C12, 99%) (72918-21-9 (Unlabeled))</b>
U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN (13C12, 99%) (35822-46-9 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%) (55673-89-7 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>OCTACHLORODIBENZO-P-DIOXIN (13C12, 99%) (3268-87-9 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>TOLUENE UNLABELED (108-88-3)</b>
<b>State or local regulations</b>
U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances U.S. - Pennsylvania - RTK (Right to Know) List U.S. - Massachusetts - Right To Know List
<b>N-NONANE UNLABELED (111-84-2)</b>
<b>State or local regulations</b>
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances

## SECTION 16: Other information

Other information : This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

Full text of R-, H- and EUH-phrases:

Acute Tox. 1 (Dermal)	Acute toxicity (dermal) Category 1
Acute Tox. 2 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 2
Acute Tox. 2 (Oral)	Acute toxicity (oral) Category 2
Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Chronic 4	Hazardous to the aquatic environment - Chronic Hazard Category 4
Asp. Tox. 1	Aspiration hazard Category 1
Carc. 1A	Carcinogenicity Category 1A
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Flam. Liq. 2	Flammable liquids Category 2
Flam. Liq. 3	Flammable liquids Category 3
Repr. 2	Reproductive toxicity Category 2
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapor
H226	Flammable liquid and vapor
H300	Fatal if swallowed



# TWO COLUMN DIOXIN & FURAN CALIBRATION SOLUTION CS4H (UNLABELED/13C12, 99%)

EDF-5429-CS4H

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H310	Fatal in contact with skin
H312	Harmful in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H330	Fatal if inhaled
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H350	May cause cancer
H361	Suspected of damaging fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated exposure
H413	May cause long lasting harmful effects to aquatic life
R10	Flammable
R11	Highly flammable
R20	Harmful by inhalation
R20/21/22	Harmful by inhalation, in contact with skin and if swallowed
R20/22	Harmful by inhalation and if swallowed
R22	Harmful if swallowed
R26/27/28	Very toxic by inhalation, in contact with skin and if swallowed
R28	Very toxic if swallowed
R36	Irritating to eyes
R36/37/38	Irritating to eyes, respiratory system and skin
R36/38	Irritating to eyes and skin
R38	Irritating to skin
R40	Limited evidence of a carcinogenic effect
R45	May cause cancer
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R53	May cause long-term adverse effects in the aquatic environment
R62	Possible risk of impaired fertility
R63	Possible risk of harm to the unborn child
R65	Harmful: may cause lung damage if swallowed
R67	Vapors may cause drowsiness and dizziness
F	Highly flammable
N	Dangerous for the environment
T+	Very toxic
Xi	Irritant
Xn	Harmful

NFPA health hazard

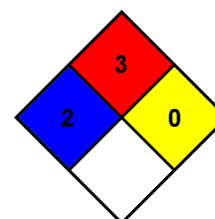
: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard

: 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions.

NFPA reactivity

: 0 - Material that in themselves are normally stable, even under fire conditions.



### Hazard Rating

Health

: 2 Moderate Hazard - Temporary or minor injury may occur

Flammability

: 3 Serious Hazard

Physical

: 0 Minimal Hazard

CIL Mixture SDS

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*